

Schistosomiasis of the urinary bladder

A case report

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Bilharzia is rarely seen in the United Kingdom but is endemic in many parts of Africa and the Near East, including Israel, Egypt, Syria, Iraq, and Iran. It was known to the Ancient Egyptians, dating back to the twentieth dynasty (1200–1090 B.C.). Schistosomiasis is the name given to a group of diseases caused by trematodes of the genus *Schistosoma*. In all its forms it is an infestation of people living in rural circumstances and dependent on fresh water for food production and bathing. The fresh water may be obtained naturally from streams and wells but increasingly comes from irrigation developments in otherwise arid areas. The disease is acquired by standing or bathing in fresh water infected by the intermediate host—the snail *Bullinus contortus*—and thereafter the parasite's life cycle is completed in man, who is the definitive host.

Because of urinary symptoms, patients with bilharzia may present in special clinics. With the increasing number of students coming to Great Britain from bilharzial districts, this case of bilharzia with non-gonococcal urethritis, recently seen in the Bournemouth clinic, was thought worth reporting.

Case report

A single, 21-year-old Libyan male, a student at the local English language school, who had arrived in England only 2 months previously, was seen in the clinic in early November, 1973. He gave a history of dysuria, terminal haematuria, and discharge of 4 days' duration, which started one day after exposure with a casual local girl.

EXAMINATION

He was found to have non-gonococcal urethritis, the urine containing coarse threads in the first glass but no blood on the 'dip-stick' test. A specimen of urine was sent for microbiological investigation with a special request for examination for bilharzia ova in view of his rural habitat in Libya. He was given tetracycline. When

seen a week later, although his symptoms of dysuria and discharge had cleared up he still complained of terminal haematuria. No organisms were grown on urine culture but the sediment contained a small number of characteristic terminal-spined ova of *Schistosoma haematobium* (Figure).

Repeat urine sediment examination contained 8 to 10 red cells per high-power field and moderate numbers of *Schistosoma haematobium* ova.

X-rays of the chest, pelvis, and bladder area were normal. Liver function tests, a full blood count including total and differential white cell count, and the erythrocyte sedimentation rate were normal. Cystoscopic examination showed bilharzial pseudo-tubercles and nodules with bleeding from one or two of these lesions.

The patient had no bowel symptoms and the perianal region was normal. He refused rectal examination. There was no history of pyrexia or local irritating dermatitis of the legs.

TREATMENT

Ambilhar (niridazole) 500 mg. three times a day for 7 days was given.

RESULT

When seen 4 and 7 days later the patient was symptom-free and no red cells or ova were found in the urine. Further follow-up was not possible as the patient had to leave for Libya.

Discussion

In over 95 per cent. of cases *Schistosoma haematobium* affects the urinary bladder because of its predilection for the vesical venous plexuses. The complaint of terminal haematuria persisting after treatment of the urethritis together with the nationality of the patient suggested the diagnosis. This was confirmed by finding bilharzia ova which are easily recognized under the low-power microscope. Repeated examination of the urine may be required to detect the parasite. Cystoscopic examination will reveal the stage of the disease and the appearances are usually pathognomonic. The supervention of complications, e.g. bladder infection, ulcer, or neoplasm, may mask the diagnosis and biopsy should then be carried out.

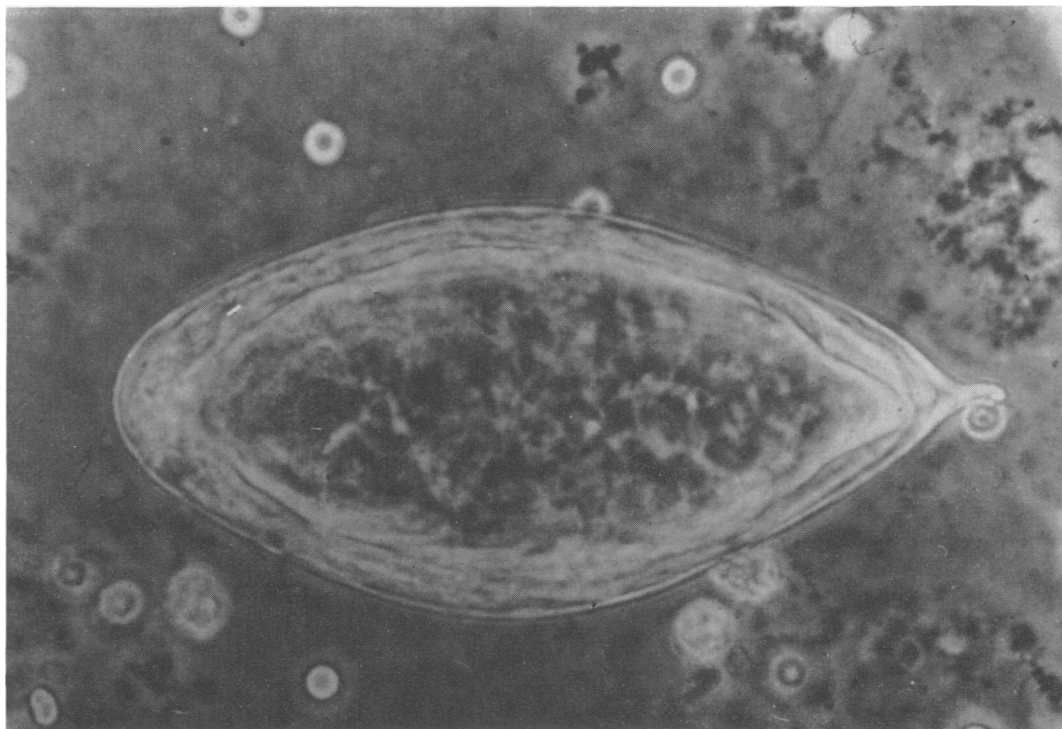


FIGURE Ova of *Schistosoma haematobium*

Usually bladder lesions can be expected to heal after antibilharzial medication but repeated courses may be necessary. Unfortunately, the period of follow-up was short in this patient's case as he had to return to Libya, and one hopes that he will seek further medical advice there as advised. In chronic, neglected cases the end-result may be serious—carcinoma of bladder.

Summary

The case is reported of a man with schistosomiasis of the bladder which gave rise to non-gonococcal urethritis. Diagnosis was confirmed by finding the characteristic terminal-spined *Schistosoma haematobium* ova in the urine deposit. The cystoscopic

appearances further confirmed the disease and its stage. The patient responded satisfactorily to treatment although the follow-up period was short.

Schistosomose de la vessie

SOMMAIRE

On rapporte le cas d'un homme atteint de schistosomose de la vessie qui fut cause d'une urétrite non gonococcique. Le diagnostic fut confirmé par la constatation, dans le dépôt urinaire, d'oeufs de *Schistosoma haematobium* avec leur éperon terminal caractéristique. Les aspects cystoscopiques confirmèrent ultérieurement la maladie et son stade. Le malade répondit favorablement au traitement, bien que la surveillance fut courte.